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Mr. Pete Kmet  
Washington State Department of Ecology  
Toxics Program  
P.O. Box 47600  
Olympia, WA 98504-7600

Dear Mr. Kmet:

PROPOSED REVISION TO THE MODEL TOXICS CONTROL ACT (MTCA) CLEANUP  
REGULATION ADDRESSING POLICIES AND PROCEDURES FOR CERTAIN TYPES OF  
CHEMICAL MIXTURES

The purpose of this letter is to respond to the Washington State Register of April 3, 2007, request for comments on proposed revisions to the Model Toxics Control Act cleanup regulation, Washington Administrative Code 173-340. RL has reviewed the proposed rule revisions and offers the attached comments and recommendations for your consideration. If you have any questions, please contact Pete J. Garcia, Jr., Director, Safety and Engineering Division, on (509) 372-1909.

Sincerely,

*Pete J. Garcia Jr.*  
for Doug S. Shoop, Assistant Manager  
for Safety and Engineering

SED:ACM

Enclosure

cc w/encl:  
R. J. Landon, WCH  
A. G. Miskho, FHI  
B. L. Vedder, WCH  
Administrative Record, HF RCRA Permit, H6-08  
Environmental Portal, LMSI  
Ecology NWP Library

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## COMMENTS ON PROPOSED AMENDMENTS TO THE MODEL TOXICS CONTROL ACT CLEANUP REGULATIONS

### General Comments

1. **Reduction of risk of combined PAHs to  $1 \times 10^{-6}$ :** It has not been made clear why the reduction of risk to  $1 \times 10^{-6}$  is justified for combined PAHs. The fact that the EPA has adapted the methodology of using Toxic Equivalency Factors for PAHs as well as dioxin/furans and PCBs in no way suggests that combinations of PAHs are as dangerous in the environment as dioxin/furans and PCBs.
2. **Exemption for PAHs in asphalt:** The revised rule should clarify that asphalt used or formerly used in roadways, parking lots, roofing, and other construction activities is exempt from regulation as PAHs. The toxicity limits of PAHs are based upon ingestion of PAHs used as wood preservatives, not upon the occurrence of PAHs in asphalt.
3. **Grandfathering of previously-remediated sites:** The amended rule provisions should clarify that they will not be used to require additional cleanup at sites previously remediated in accordance with the regulation in effect at the time.
4. **Implementation in situations where the practical quantitation limit (PQL) for an individual constituent is above the Method B  $1 \times 10^{-6}$  risk limit:** The proposed requirement to sum the risk from individual constituents (e.g., individual PAH constituents) within a mixture, with the resultant total compared to a  $1 \times 10^{-6}$  cancer risk, raises a concern with regard to situations where the PQL for a constituent is above the  $1 \times 10^{-6}$  risk level. In such instances, using the PQL as the concentration would obviously cause the total to exceed the Method B  $1 \times 10^{-6}$  risk limit for the mixture. Using the  $1 \times 10^{-6}$  risk-based cleanup level as the contaminant concentration for risk summation calculations (as suggested by Ecology's Implementation Memo No. 3) would result in any other constituent present in the mixture causing the Method B  $1 \times 10^{-6}$  risk limit to be exceeded.

To address this situation, the rule should state that if the PQL for an individual dioxin/furan, PCB, or PAH constituent is above the risk-based cleanup level, then the concentration of that constituent will not be included in the summation of constituents for purposes of comparing to the Method B  $1 \times 10^{-6}$  risk limit.

5. **Assays of undetected congeners should be set equal to zero:** The revised rule should clarify that if a congener of dioxins/furans, PAHs or PCBs is undetected in all assays the value used in the risk calculation shall be set equal to zero. Ecology commonly uses one-half the PQL as the assay for contaminants that are undetected. If one-half the PQL were to be used in the risk calculation as the assay for all of the contaminants from Tables 708-1, 708-2, 708-3, and 708-4 that are undetected it would be virtually impossible to meet a  $1 \times 10^{-6}$  risk level for dioxins/furans, PAHs and PCBs.

### Specific Comments

1. **WAC 173-303-900, Table 708-1:** In Table 708-1 the Chemical Abstract Service (CAS) number shown for 1,2,3,4,7,8-Hexachloro-dibenzo-p-dioxin is incorrect. The correct CAS number is 39227-28-6.
2. **WAC 173-303-900, Tables 708-2 and 708-3:** The relevance and appropriateness of Tables 708-2 and 708-3 are questionable for several reasons. Ecology should follow the procedures they have established in WAC 173-340-708(8)(a), WAC 173-340-708(8)(b), and WAC 173-340-708(8)(c) and use USEPA published values where available. Cal-EPA 2005 is cited as the source of Tables 708-2 and 708-3. This source is not recognized in WAC 173-340-708(8)(a) as a source of relevant toxicity information and there is no clear and convincing scientific data which demonstrates that the use of the values available from U.S. Environmental Protection Agency (USEPA) publications are inappropriate. The Cal-EPA 2005 source cites identical cancer slope factors for benzo(a)pyrene and dibenzo(a,h)pyrene. How can the carcinogenic toxic equivalency factor for dibenzo(a,h)pyrene be 10 times the carcinogenic toxic equivalency factor for benzo(a)pyrene when the cancer slope factors are identical? A thorough reading of the basis for the carcinogenic toxic equivalency factor for dibenzo(a,h)pyrene shows that it comes from one dermal study of mice. An animal dermal study would not pass the peer review required to establish an oral ingestion cancer slope factor and should not be used to establish the carcinogenic toxic equivalency factor for dibenzo(a,h)pyrene.